

FIG. 1

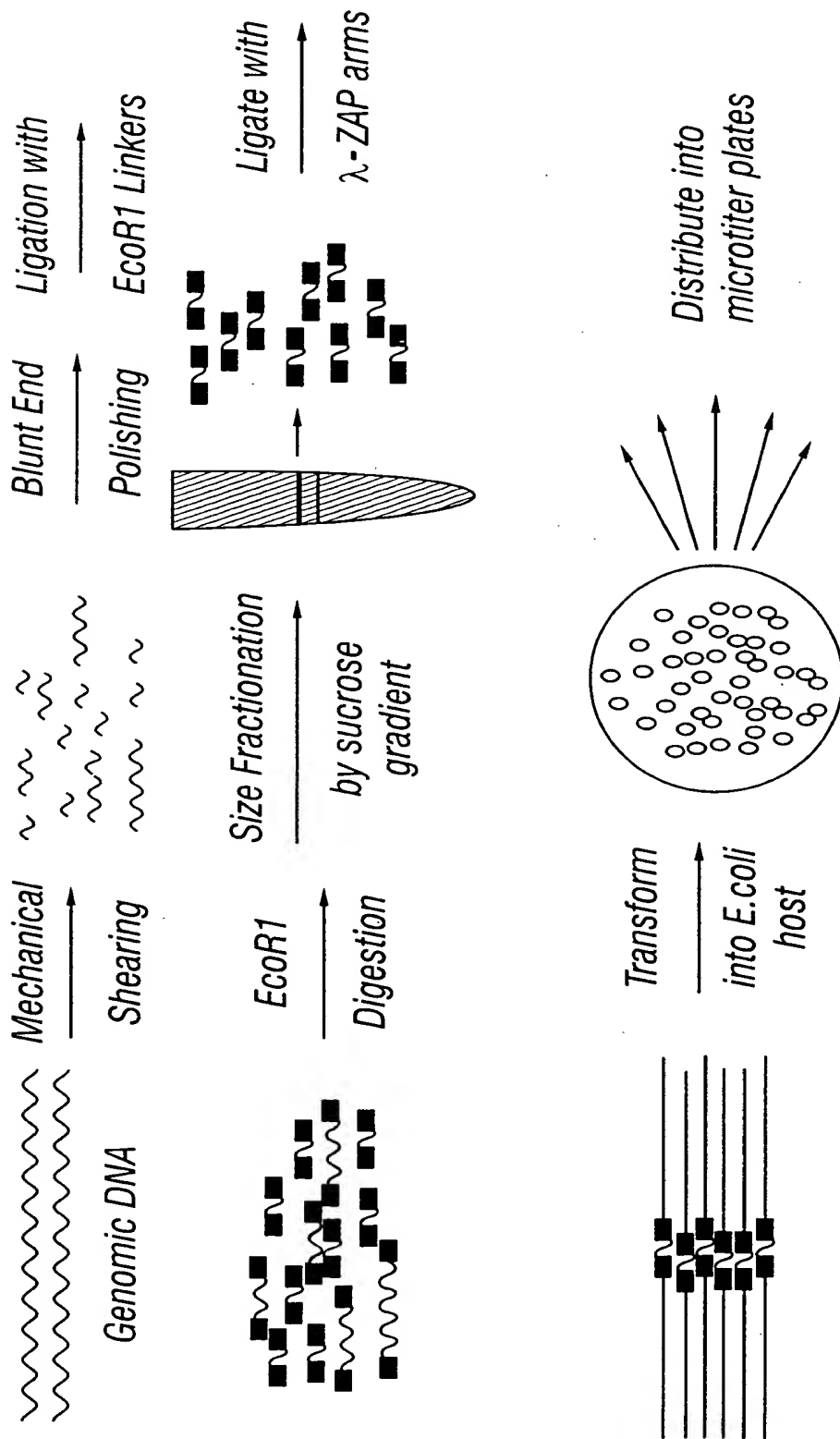


FIG. 2

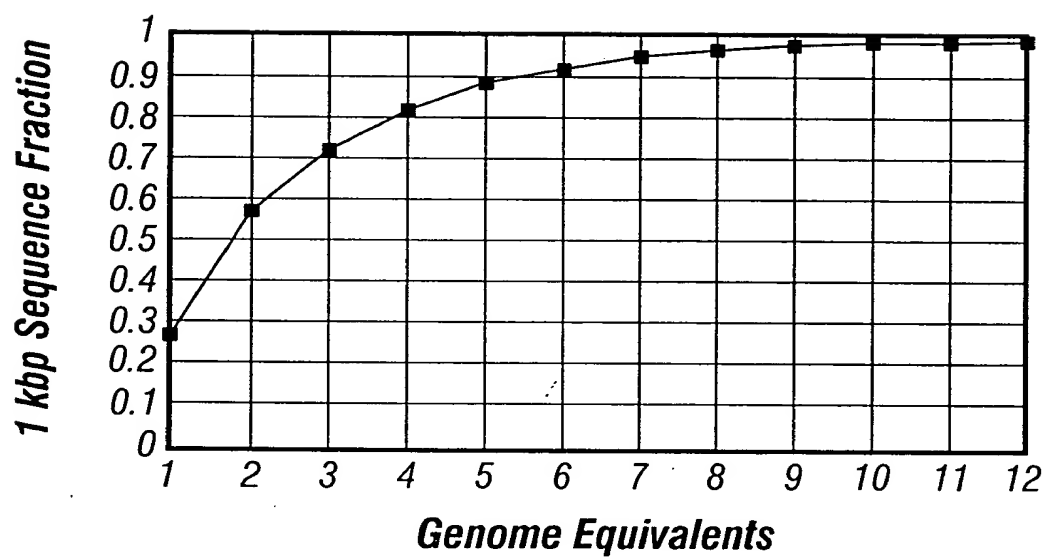
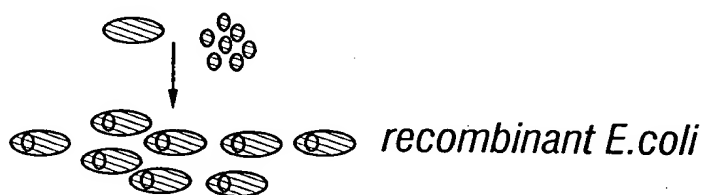


FIG. 3

*Cell sorting to screen for recombinant
enzymes*

excise λ library into E.coli



add enzyme substrate



*recombinant enzyme
cleaves substrate
to make cells fluorescent*



sort

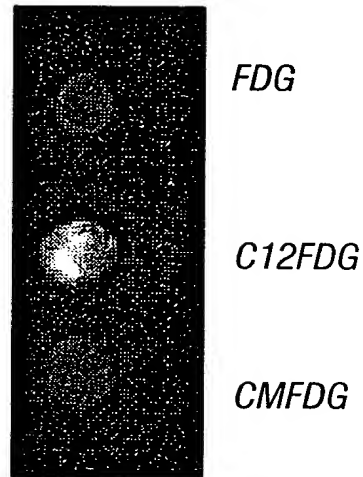


isolate expression clone

FIG. 4

β -Gal clone with different substrates

- cells were stained with FDG, CMFDG or C12FDG, incubated for 30 min. at 70°C, spotted onto a slide and exposed to UV light.
- bright spot indicates staining of cells

**FIG. 5**

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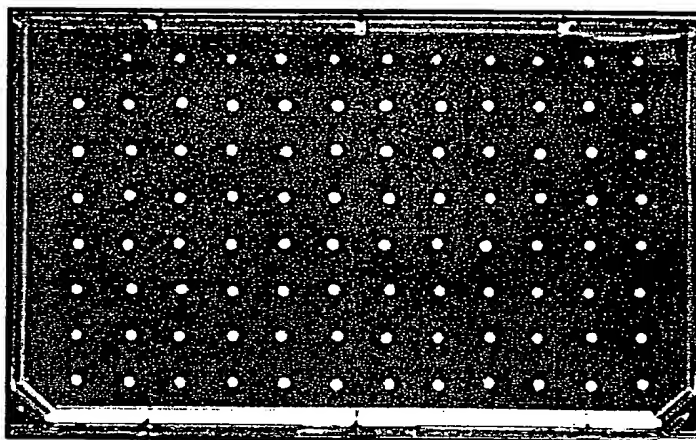


FIG. 6

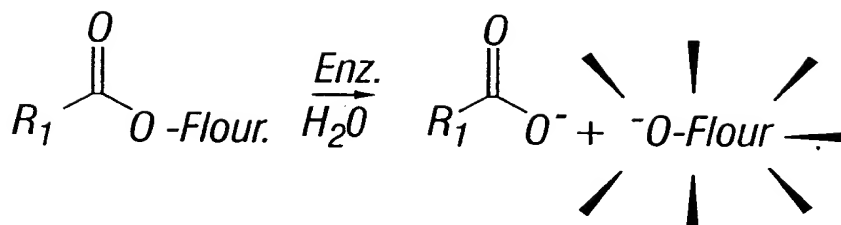


FIG. 7

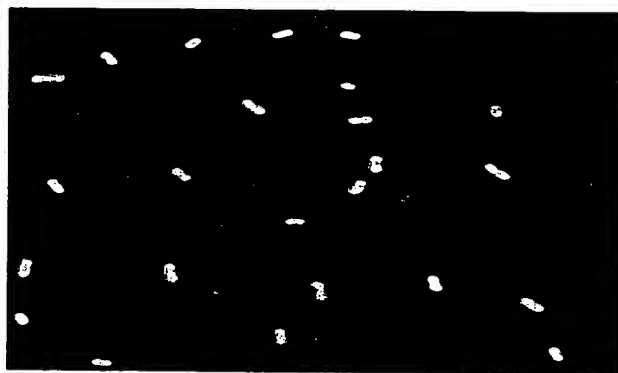


FIG. 8

0503101 0503101 0503101

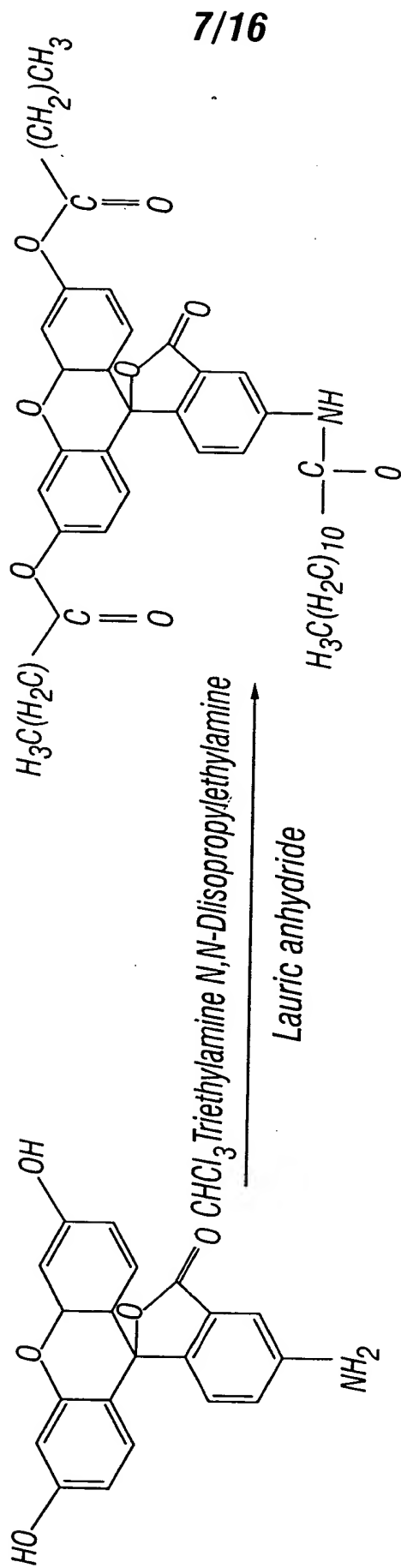


FIG. 9

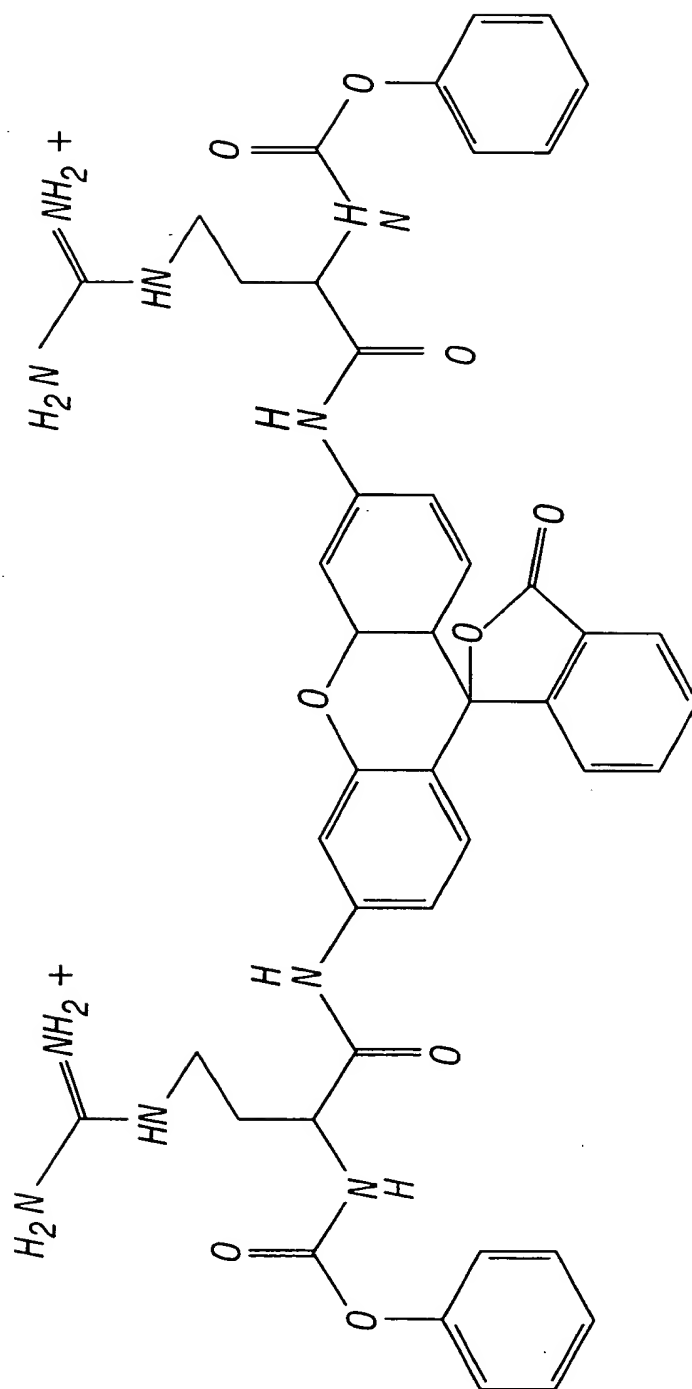
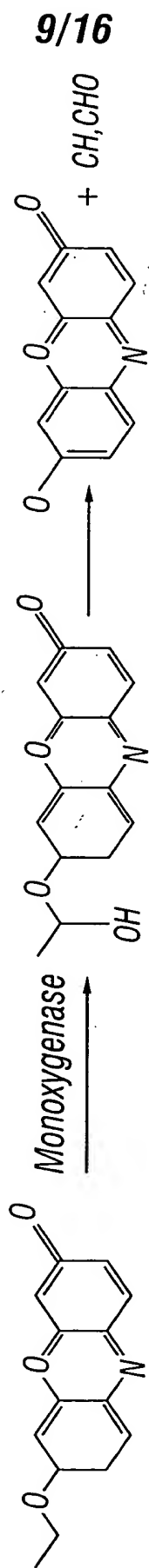


FIG. 10



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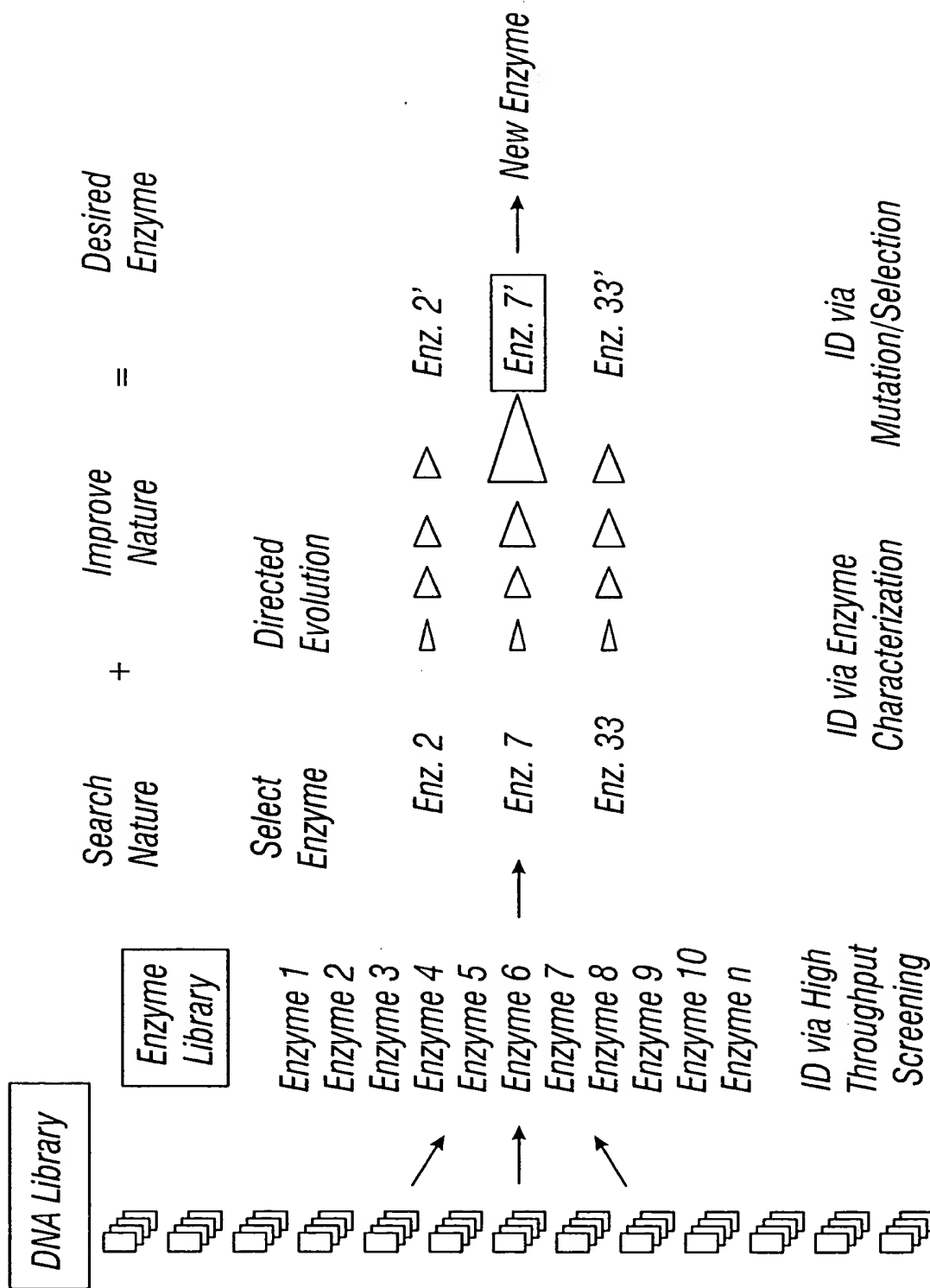


FIG. 12

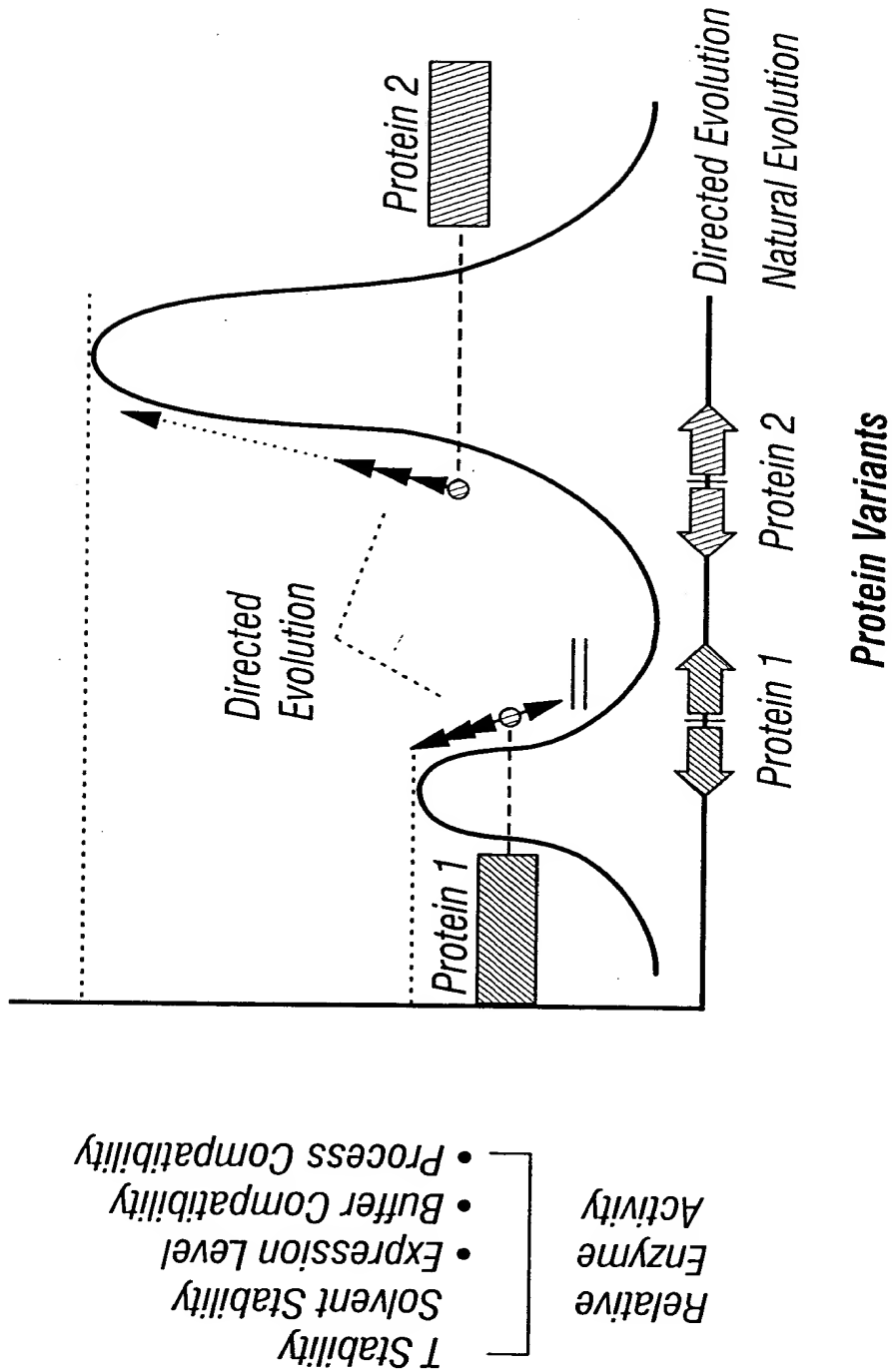


FIG. 13

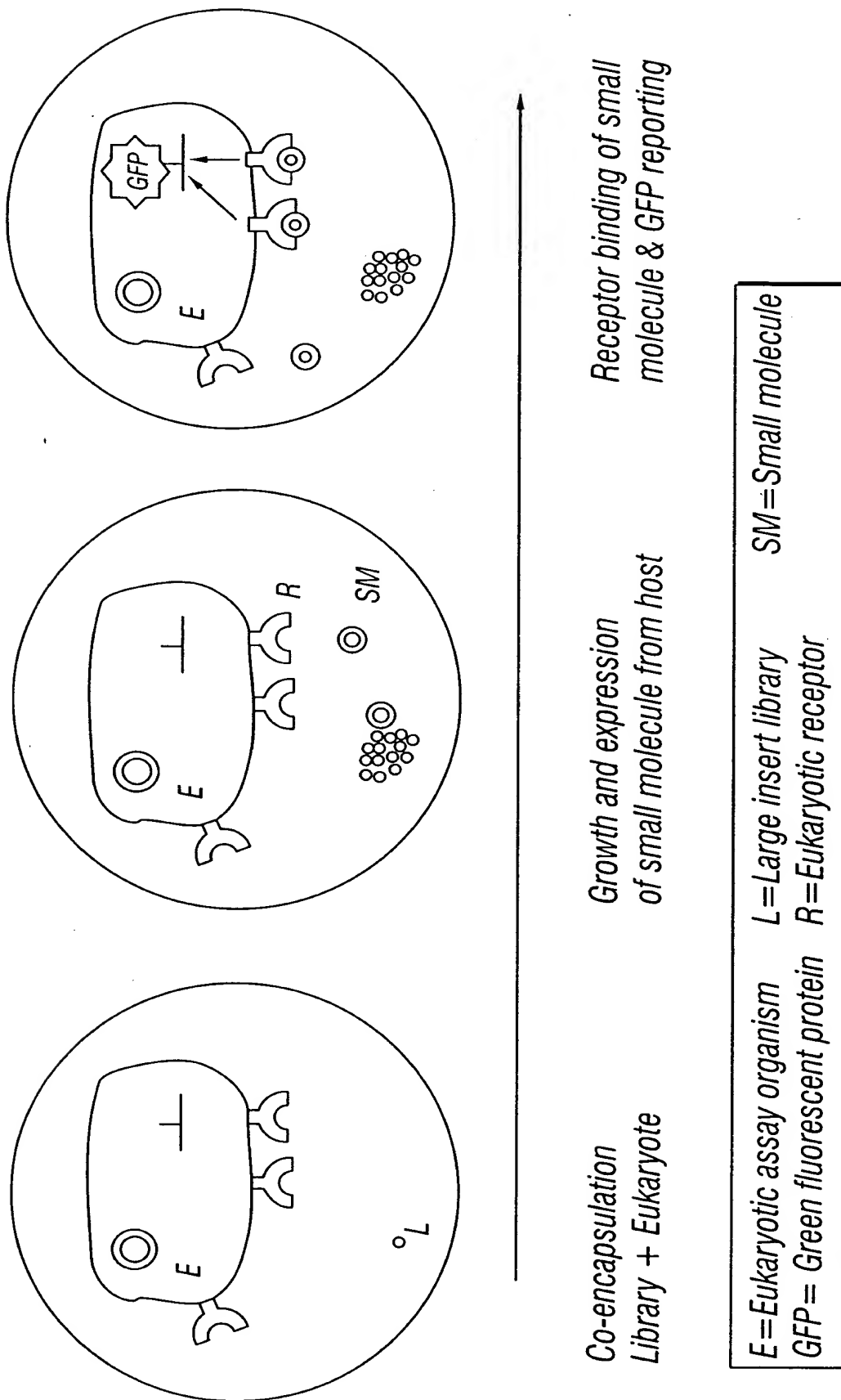


FIG. 14

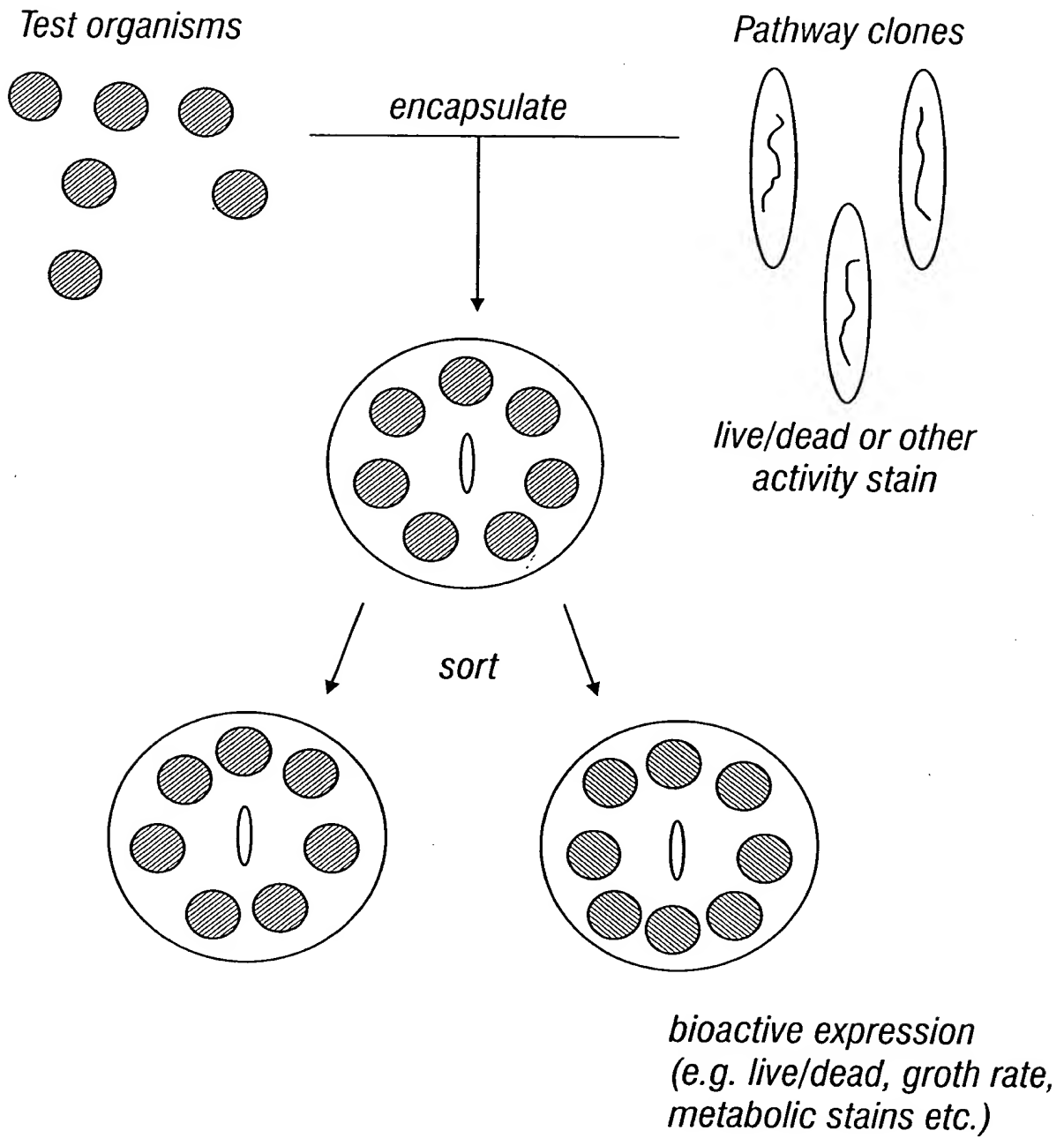
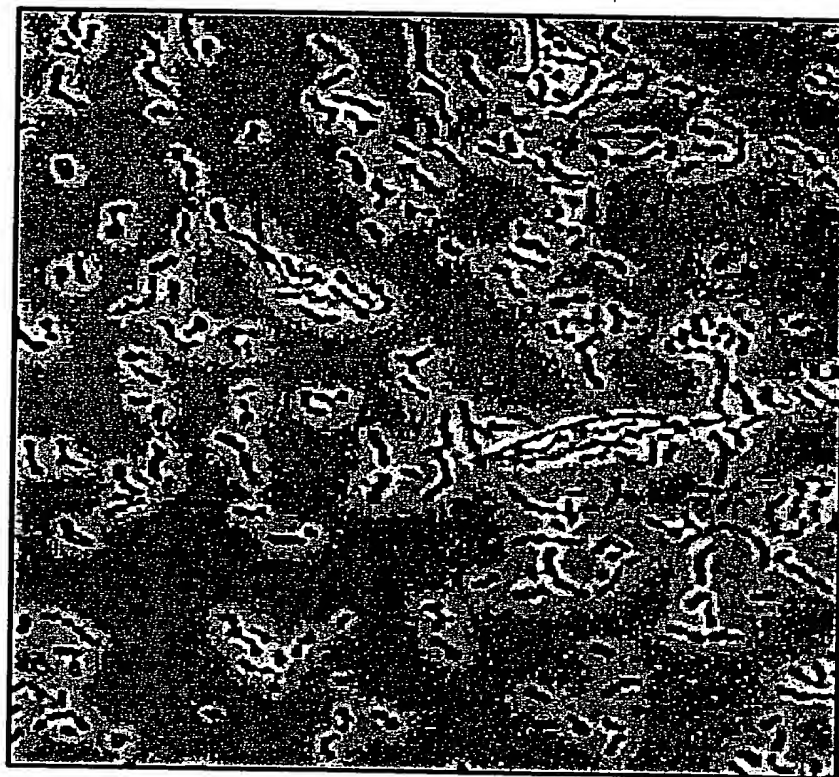
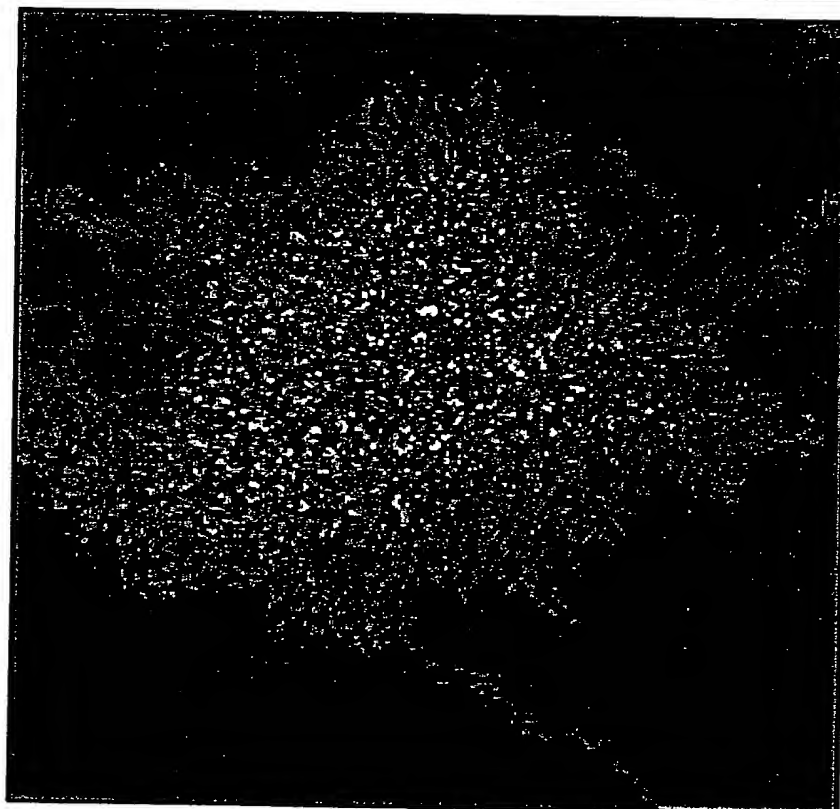


FIG. 15

098485.050301
T0E050" S8T84860



Streptomyces "diversa"
Unicells



Streptomyces lividans
mycelia

FIG. 16

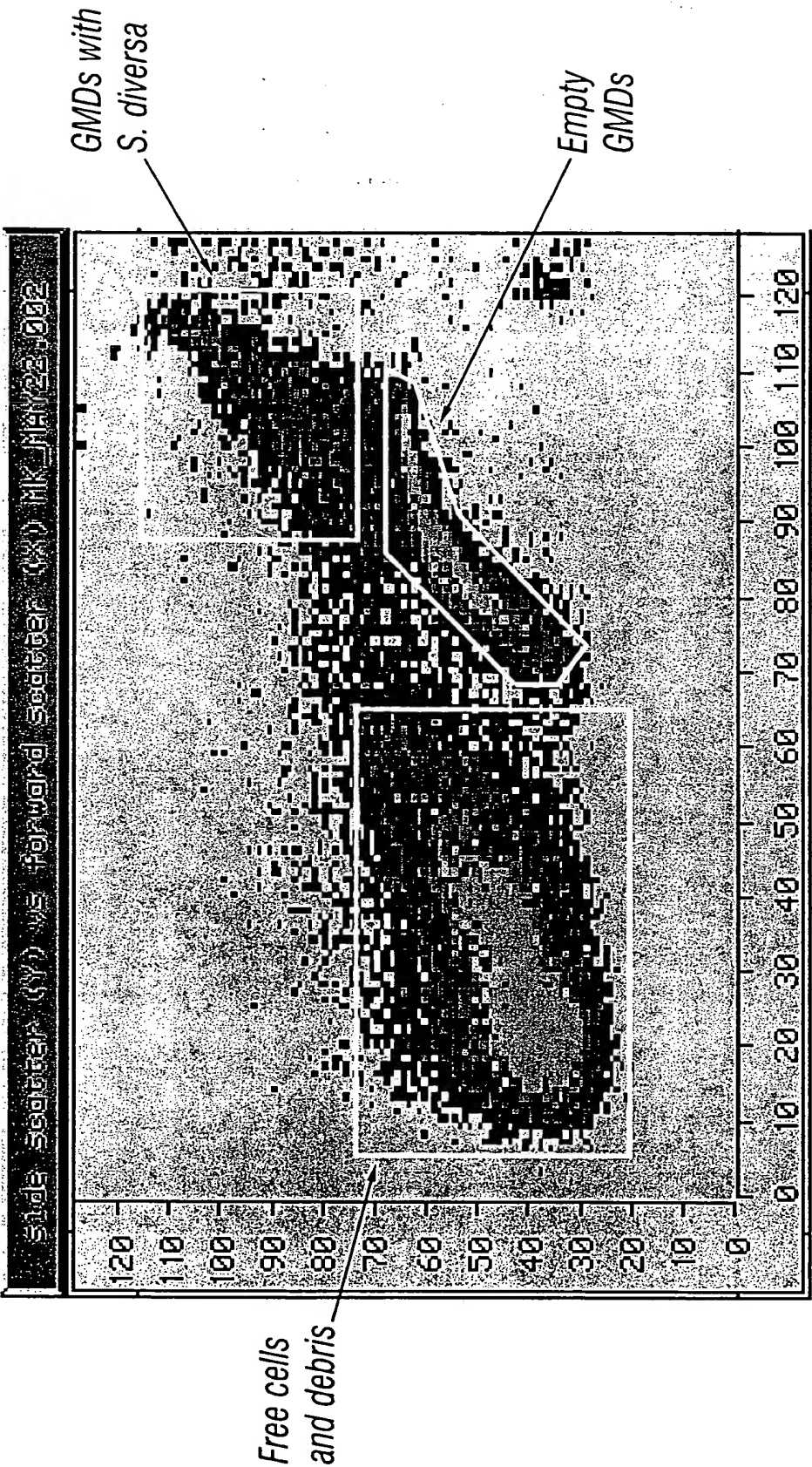


FIG. 17

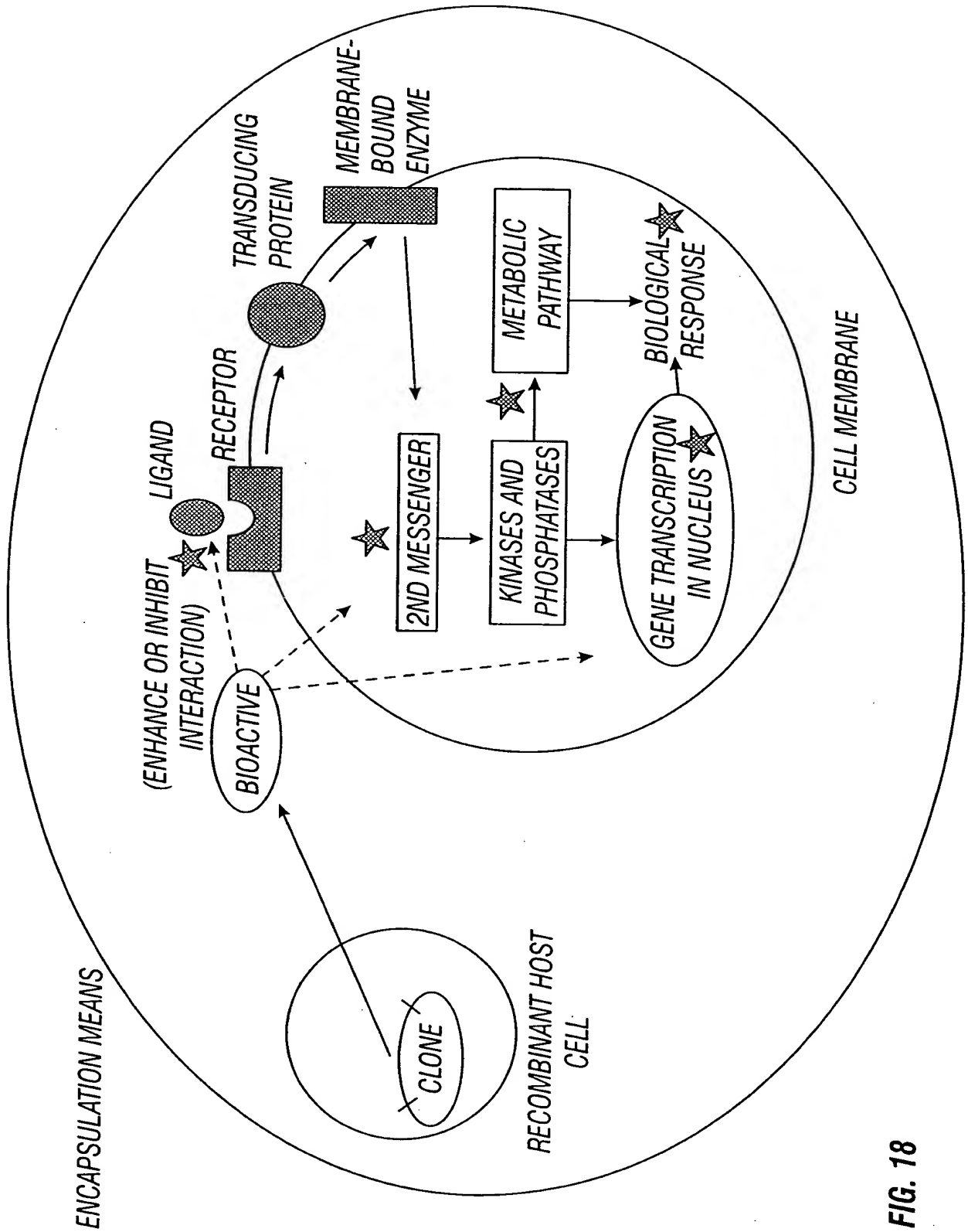


FIG. 18